



HONDA MOTOR CO., LTD.

31MC000

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PRINTED IN JAPAN

'82

# OWNER'S MANUAL

**HONDA**  
**CM450** CUSTOM

READ BEFORE YOU RIDE!



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## IMPORTANT NOTICE

### • OPERATOR AND PASSENGER

This motorcycle is designed to carry the operator and one passenger. Never exceed the vehicle capacity load as shown on the tire information label.

### • ON-ROAD USE

This motorcycle is not equipped with a spark arrester and is designed to be used only on the road. Operation in forest, brush or grass covered areas may be illegal. Obey local laws and regulations.

### • READ OWNER'S MANUAL CAREFULLY

Pay special attention to statements preceded by the following words:

#### **WARNING**

*Indicates a strong possibility of severe personal injury or loss of life if instructions are not followed.*

#### **CAUTION:**

*Indicates a possibility of personal injury or equipment damage if instructions are not followed.*

#### **NOTE:** Gives helpful information.

This manual should be considered a permanent part of the vehicle and should remain with the vehicle when resold.

## HONDA CM450 CUSTOM OWNER'S MANUAL

1982



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## WELCOME,

Your new motorcycle presents you with an invitation to adventure and a challenge to master the machine. Your safety depends not only on your own alertness and familiarity with the machine, but also the machine's mechanical condition. A pre-ride inspection before every outing and regular maintenance are essential.

To help meet the challenges safely and enjoy the adventure fully, become thoroughly familiar with this Owner's Manual **BEFORE YOU RIDE THE MOTORCYCLE**. Also, for your own and your Honda's sake, please read all the written material which came with your new Honda. These items include;

- \* Honda Owner's Identification Card
- \* Set-up and Predelivery Checklist
- \* Honda Motorcycle Emission Control System, Distributor's Warranty
- \* Honda Motorcycle, Distributor's Limited Warranty

When service is required, remember that your Honda dealer knows what it takes to keep your Honda going strong. If you have the required mechanical "know-how" and tools, your dealer can supply you with an official Honda Shop Manual to help you perform many maintenance and repair tasks.

Pleasant riding, and thank you for choosing a Honda!

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## MOTORCYCLE SAFETY

### WARNING

\* *Motorcycle riding requires special efforts on your part to ensure your safety. Know these requirements before you ride.*

### SAFE RIDING RULES

1. Always make a pre-ride inspection (page 29) before you start the engine. You may prevent an accident or equipment damage.
2. Many accidents involve inexperienced riders. Most states require a special motorcycle riding test or license. Make sure you are qualified before you ride. NEVER lend your motorcycle to an inexperienced rider.
3. Many automobile/motorcycle accidents happen because the automobile driver does not "see" the motorcyclist. Make yourself conspicuous to help avoid the accident that wasn't your fault:
  - Wear bright or reflective clothing.
  - Don't drive in another motorist's "blind spot."

4. Obey all federal, state and local laws and regulations.
  - Excessive speed is a factor in many accidents. Obey the speed limits, and NEVER travel faster than conditions warrant.
  - Signal before you make a turn or lane change. Your size and maneuverability can surprise other motorists.
5. Don't let other motorists surprise you. Use extra caution at intersections, parking lot entrances and exits, and driveways.
6. Keep both hands on the handlebars and both feet on the footpegs while riding. A passenger should hold on to the motorcycle or the operator with both hands and keep both feet on the passenger footpegs.

## PROTECTIVE APPAREL

1. Most motorcycle accident fatalities are due to head injuries: **ALWAYS** wear a helmet. You should also wear a face shield or goggles as well as boots, gloves, and protective clothing. A passenger needs the same protection.
2. The exhaust system becomes very hot during operation, and it remains hot after operation. Never touch any part of the hot exhaust system. Wear clothing that fully covers your legs.
3. Do not wear loose clothing which could catch on the control levers, footpegs, drive chain or wheels.

## MODIFICATIONS

### WARNING

- \* *Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal. Obey all federal, state and local equipment regulations.*

## LOADING AND ACCESSORIES

### WARNING

*To prevent an accident, use extreme care when adding and riding with accessories and cargo. Addition of accessories and cargo can reduce a motorcycle's stability, performance and safe operating speed. Never ride an accessory-equipped motorcycle at speeds above 80 mph. And remember that this 80 mph limit may be reduced by installation of non-Honda accessories, improper loading, worn tires and overall motorcycle condition, poor road or weather conditions, etc. These general guidelines may help you decide whether or how to equip your motorcycle, and how to load it safely.*

### Loading

The combined weight of the rider, passenger, cargo and all accessories must not exceed 400 lbs, the vehicle capacity load. Cargo weight alone should not exceed 40 lbs.

1. Keep cargo and accessory weight low and close to the center of the motorcycle. Load weight equally on both sides to minimize imbalance. As weight is located farther from the motorcycle's center of gravity, handling is proportionally affected.
2. Adjust tire pressure (TIRES, page 5) and rear shock absorber springs (SHOCK ABSORBERS, page 9) to suit load weight and riding conditions.
3. Luggage racks are for light weight items. Do not carry more than 20 lbs. of cargo on a luggage rack behind the seat. Bulky items too far behind the rider may cause wind turbulence that impairs handling.
4. All cargo and accessories must be secure for stable handling. Re-check cargo security and accessory mounts frequently.
5. Do not attach large, heavy items to the handlebars, front forks, or fender. Unstable handling or slow steering response may result.



## Accessories

Genuine Honda accessories have been specifically designed for and tested on this motorcycle.

Because the factory cannot test all other accessories, you are personally responsible for proper selection, installation, and use of non-Honda accessories. Always follow the guidelines under Loading, and these:

1. Carefully inspect the accessory to make sure it does not obscure any lights, reduce ground clearance and banking angle, or limit suspension travel, steering travel or control operation.
2. Large fork-mounted fairings or windshields, or poorly designed or improperly mounted fairings can produce aerodynamic forces that cause unstable handling. Do not install fairings that decrease cooling air flow to the engine.

3. Accessories which alter your riding position by moving hands or feet away from controls may increase reaction time in an emergency.
4. Do not add electrical equipment that will exceed the motorcycle's electrical system capacity. A blown fuse could cause a dangerous loss of lights or engine power at night or in traffic.
5. This motorcycle was not designed to pull a sidecar or trailer. Handling may be seriously impaired if so equipped.

## TUBELESS TIRES

This motorcycle is equipped with tubeless tires, valves, and wheel rims. Use only tires marked "TUBELESS" and tubeless valves on rims marked "TUBELESS TIRE APPLICABLE."

Proper air pressure will provide maximum stability, riding comfort and tire life. Check tire pressure frequently and adjust if necessary.

### NOTE:

- \* Tire pressure should be checked when the tires are "cold," before you ride.
- \* Tubeless tires have some degree of self-sealing ability if they are punctured, and leakage is often very slow. Inspect very closely for punctures, especially if the tire is not fully inflated.

Dry weight kg (lbs)	174 (384)
Curb weight (wet) kg (lbs)	187 (412)
Gross vehicle weight rating kg (lbs)	367 (810)
Vehicle capacity load kg (lbs)	181 (400)

		Front	Rear
Tire size		3.50S18-4PR	4.60S16-4PR
Cold tire pressures psi (kPa, kg/cm <sup>2</sup> )	Up to 90 kg (200 lbs) load	28 (200, 2.0)	28 (200, 2.0)
	90 kg (200 lbs) load to vehicle capacity load	28 (200, 2.0)	36 (250, 2.5)
Tire brand (TUBELESS ONLY)			
BRIDGESTONE		S703	L 302
DUNLOP		F11	K127
YOKOHAMA		Y-992	Y-987

Check the tires for cuts, imbedded nails or other sharp objects. Check the rims for dents or deformation. If there is any damage, see your authorized Honda dealer for repair, replacement, and balancing.

**WARNING**

- \* *Improper tire inflation will cause abnormal tread wear and create a safety hazard. Underinflation may result in the tire slipping on, or coming off of the rim.*
- \* *Operation with excessively worn tires is hazardous and will adversely affect traction and handling.*

Replace tires before tread depth at the center of the tire reaches the following limit:

Minimum tread depth
Front: 1.5 mm (1/16 in) Rear: 2.0 mm (3/32 in)

**Repair/Replacement:**

See your authorized Honda Dealer

**WARNING**

- \* *The use of tires other than those listed on the tire information label may adversely affect handling.*
- \* *Do not install tube-type tires on tubeless rims. The beads may not seat and the tires could slip on the rims, causing tire deflation.*
- \* *Proper wheel balance is necessary for safe, stable handling of the motorcycle. Do not remove or change any wheel balance weights. When wheel balancing is required, see your authorized Honda dealer. Wheel balancing is required after tire repair or replacement.*
- \* *Do not exceed 50 mph for the first 24 hours after tire repair, or repair failure and tire deflation may result. Never use a repaired tire at speeds over 80 mph.*

- \* *Replace the tire if the sidewall is punctured or damaged. Sidewall flexing may cause repair failure and tire deflation.*

**CAUTION:**

- \* *Do not try to remove tubeless tires without special tools and rim protectors. You may damage the rim sealing surface or disfigure the rim.*

## FRONT SUSPENSION

The front suspension of this motorcycle is air assisted to provide a comfortable ride under various riding conditions. The recommended pressure is:

Front  
 $11 \pm 3$  psi ( $80 \pm 20$  kPa,  
 $0.8 \pm 0.2$  kg/cm<sup>2</sup>)

Check air pressure when the front fork tubes are cold before riding.

1. Place the motorcycle on its center stand.  
Do not use the side stand or you will get false pressure readings.
2. Remove the front fork air valve cap (1).
3. Check the air pressure using a pressure gauge.

### NOTE:

- \* Some pressure will be lost when removing the gauge from the valve. Determine the amount of loss and compensate accordingly.

4. Add air to the recommended pressure.

### NOTE:

- \* Do not exceed recommended air pressure or the ride will be harsh and uncomfortable.

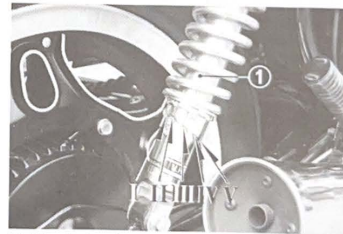


(1) Valve cap

## SHOCK ABSORBERS

Each shock absorber (1) has five adjustment positions for different load or riding conditions.

Position I is for light loads and smooth road conditions. Positions II to V increase spring preload for a stiffer rear suspension, and can be used when the motorcycle is heavily loaded. Be certain to adjust both shock absorbers to the same position.



(1) Shock absorber



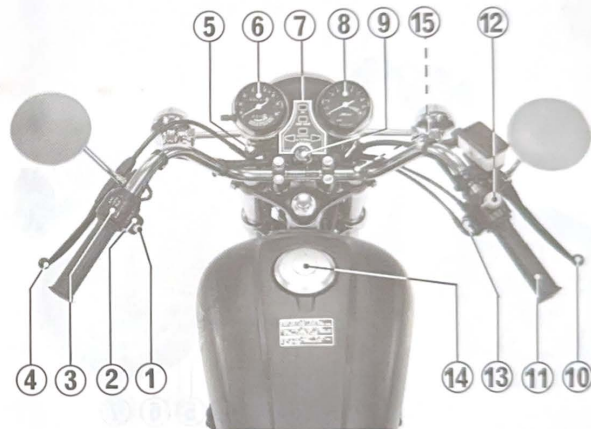
(2) Hook spanner



## DESCRIPTION

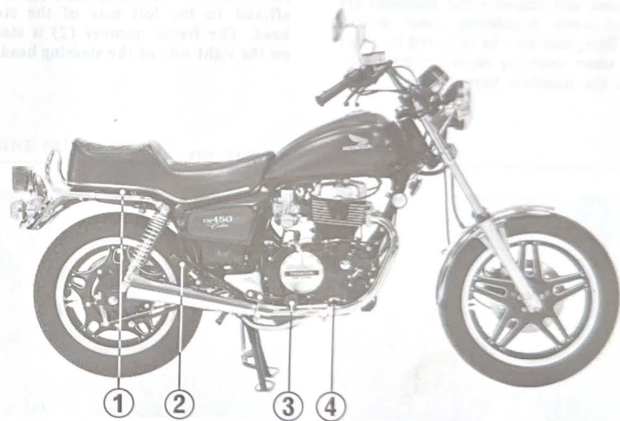
### PARTS LOCATION

- ( 1 ) Horn button
- ( 2 ) Turn signal switch
- ( 3 ) Headlight dimmer switch
- ( 4 ) Clutch lever
- ( 5 ) Choke knob
- ( 6 ) Speedometer
- ( 7 ) Indicator and warning lights
- ( 8 ) Tachometer
- ( 9 ) Ignition switch
- (10) Front brake lever
- (11) Throttle grip
- (12) Engine stop switch
- (13) Starter button
- (14) Fuel tank cap
- (15) Air valve cap





- (1) Fuel valve  
(2) Gearshift pedal  
(3) Footpeg  
(4) Center stand  
(5) Side stand  
(6) Passenger footpeg  
(7) Seat latch



- (1) Seat latch  
(2) Passenger footpeg  
(3) Footpeg  
(4) Rear brake pedal

## SERIAL NUMBERS

The frame and engine serial numbers are required when registering your motorcycle. They may also be required by your dealer when ordering replacement parts. Record the numbers here for your reference.

VIN. \_\_\_\_\_



(1) VIN number

The VIN, Vehicle Identification Number (1), is on the Safety Certification Label affixed to the left side of the steering head. The frame number (2) is stamped on the right side of the steering head.

FRAME NO. \_\_\_\_\_



(2) Frame number

The engine number (3) is stamped on the top of the crankcase.

ENGINE NO. \_\_\_\_\_



(3) Engine number

## PARTS FUNCTION

### Instruments and Indicators

The indicators and warning lights are grouped between the instruments, above the headlight. Their functions are described in the tables on the following pages.

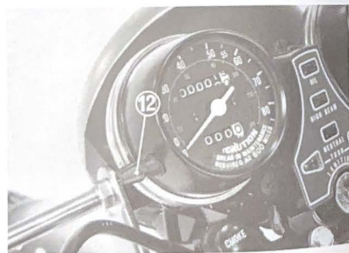
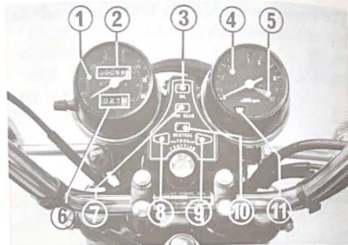
#### USA model

Odometer and tripmeter read in miles.

#### Canadian model

Odometer and tripmeter read in kilometers.

- (1) Speedometer
- (2) Odometer
- (3) Oil pressure warning light
- (4) Tachometer
- (5) Tachometer red zone
- (6) Tripmeter
- (7) High beam indicator
- (8) Left turn signal indicator
- (9) Right turn signal indicator
- (10) Neutral indicator
- (11) Over drive indicator
- (12) Tripmeter reset knob



Ref. No.	Description	Function
1	Speedometer	Shows driving speed, 0 to 85 mph.
2	Odometer	Shows accumulated mileage.
3	Oil pressure warning light (red)	Lights when engine oil pressure is below normal operating range. Should light when ignition switch is ON and engine is not running. Should go out when engine starts, except for occasional flickering at or near idling speed when the engine is warm. <b>CAUTION:</b> * <i>Running the engine with insufficient oil pressure will cause serious engine damage.</i>
4	Tachometer	Shows engine rpm.
5	Tachometer red zone	Avoid operating the engine in the red zone. NEVER operate beyond the red zone. <b>CAUTION:</b> * <i>Exceeding recommended maximum engine rpm may cause serious engine damage.</i>

Ref. No.	Description	Function
6	Tripmeter	Shows mileage per trip.
7	High beam indicator (blue)	Lights when headlight is on high beam.
8	Left turn signal indicator (amber)	Flashes when left turn signal operates.
9	Right turn signal indicator (amber)	Flashes when right turn signal operates.
10	Neutral indicator (green)	Lights when transmission is in neutral.
11	Over drive indicator (green)	Light when transmission is in 6th gear.
12	Tripmeter reset knob	Resets tripmeter to zero (0). Turn knob in direction shown.

### Ignition Switch

The ignition switch (1) is below the indicator panel.



(1) Ignition switch

Key Position	Function	Key Removal
OFF	Engine and lights cannot be operated.	Remove the key.
ON (red dot)	Headlight, taillight and instrument lights will be on and other lights can be operated. The engine can be started.	Key cannot be removed.
P	For parking the motorcycle near traffic. The tail-light will be on but all other lights will be off. The engine cannot be started.	Remove the key.

### Engine Stop Switch

The three position engine stop switch (1) is next to the throttle grip. In RUN, the engine will operate. In either OFF position, the engine will not operate. This switch is intended primarily as a safety or emergency switch and should normally remain in RUN.

#### NOTE:

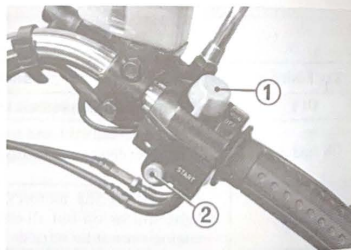
- \* If your motorcycle is stopped with the ignition switch ON and the engine stop switch OFF, the headlight and taillight will still be on, resulting in battery discharge.

### Starter Button

The starter button (2) is below the engine stop switch (1).

When the starter button is pressed, the starter motor will crank the engine and the headlight will automatically go out, but the taillight will stay on.

See pages 30–32 for the starting procedure.



(1) Engine stop switch (2) Starter button

The three controls next to the left handlebar grip are:

### Headlight Dimmer Switch (1)

Select HI for high beam, LO for low beam.

### Turn Signal Switch (2)

Move to L to signal a left turn, R to signal a right turn. Return to the center (off) when finished.

### Horn Button (3)

Press the button to sound the horn.



(1) Headlight dimmer switch  
(2) Turn signal switch  
(3) Horn button



### Steering Lock

The steering lock (1) is on the steering stem.

#### To Lock:

Turn the handlebars all the way to the left or right, insert the key into the lock, turn the key to the left and press in. Turn the key back to the right and remove it.



(1) Steering lock

### Document Compartment

The document compartment (1) is under the seat.

This owner's manual and other documents should be stored in the plastic bag. When washing your motorcycle, be careful not to flood this area with water.



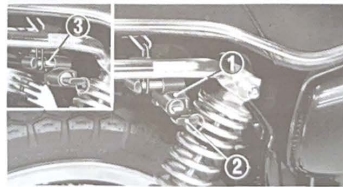
(1) Document compartment

### Helmet Holder

The helmet holder (1) is on the right side below the seat. Insert the ignition key (2) and turn it counterclockwise to unlock. Hang your helmet on the lock and push in the holder pin (3).

#### WARNING

*\* The helmet holder is designed for use while parking. Do not operate the motorcycle with a helmet attached to the holder. The helmet may interfere with the rear wheel, possibly stopping the wheel.*



(1) Helmet holder

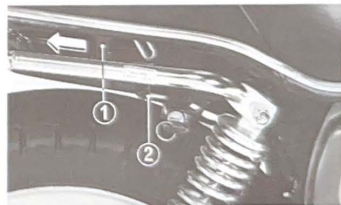
(2) Ignition key

(3) Holder pin

### Seat Removal

The seat is secured by a latch (1) on each side of the seat, at the rear. Pull both latches to remove the seat. When replacing the seat, push down firmly.

Lift the seat to make sure the latches are secure. The ring (2) can be used to lock the seat to the helmet holder.



(1) Seat latch

(2) Ring

## FUEL

### Fuel Valve

The three way fuel valve (1) is on the left underneath the fuel tank.

### OFF

At OFF, fuel cannot flow from the tank to the carburetors. Turn the valve off whenever the motorcycle is not in use.

### ON

At ON, fuel will flow from the main fuel supply to the carburetors.

### RES

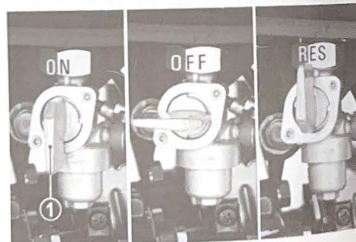
At RES, fuel will flow from the reserve fuel supply to the carburetors. Use the reserve fuel only when the main supply is gone. Refill the tank as soon as possible after switching to RES. The reserve fuel supply is 2.0 l (0.5 US gal).

### NOTE:

- \* Do not operate the machine with the fuel valve in the RES position after refueling. You may run out of fuel, with no reserve.

### WARNING

- \* *Know how to operate the fuel valve while riding the motorcycle. You may avoid a sudden stop in traffic.*
- \* *Be careful not to touch any hot engine parts while operating the fuel valve.*

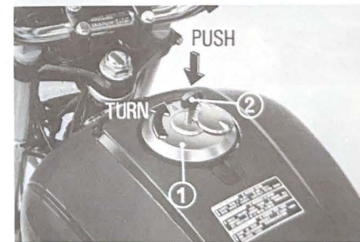


(1) Fuel valve

### Fuel Tank

Fuel tank capacity is 13.0 l (3.4 US gal) including 2.0 l (0.5 US gal) in the reserve supply. To remove the fuel tank cap (1), insert the ignition key (2) and turn it clockwise. The cap will pop up and can be lifted off.

Any automotive gasoline with a pump octane number  $\left(\frac{R + M}{2}\right)$  of 86 or higher, or a research octane number of 91 or



(1) Fuel tank cap

(2) Ignition key

higher may be used. If "knocking" or "pinging" occurs, try a different brand of gasoline or a higher octane grade.

To attach the fuel tank cap, align the cap with the filler opening and push down until the lock snaps closed – the cap locks automatically. Remove the key and close the lock cover.

### WARNING

- \* *Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well ventilated area with engine stopped. Do not smoke or allow flames or sparks in the area where the motorcycle is refueled or where gasoline is stored.*
- \* *Do not overfill the tank. After refueling, make sure the tank cap is closed securely.*

## ENGINE OIL

### Engine Oil Level Check

Check engine oil level each day before operating the motorcycle.

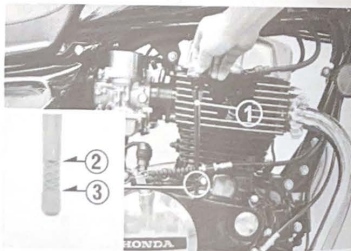
Oil level must be maintained between the upper (2) and lower (3) oil level marks on the dipstick (1).

1. Run the engine and let it idle for a few minutes. Make sure the red oil pressure warning light goes off. If the red oil pressure warning light remains on, stop the engine immediately.
2. Stop the engine and put the motorcycle on its center stand.
3. After a few minutes, remove the oil filler cap/dipstick (1), wipe it clean, and reinsert the dipstick without screwing it in. The oil level should be between the upper (2) and lower (3) marks on the dipstick.

4. If required, add the specified oil up to the upper level mark. Do not overfill.
5. Replace the filler cap/dipstick. Check for oil leaks.

### CAUTION:

\* *Running the engine with insufficient oil can cause serious engine damage.*



(1) Filler cap/dipstick  
(2) Upper level mark  
(3) Lower level mark

### Engine Oil Recommendation

USE HONDA 4-STROKE OIL OR AN EQUIVALENT.

Use only high detergent, premium quality motor oil certified to meet or exceed US automobile manufacturers' requirements for Service Classification SE or SF.

Motor oils intended for Service SE or SF will show this designation on the container.

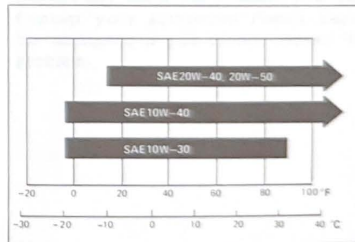
The use of special oil additives is unnecessary and will only increase operating expenses.

### CAUTION:

\* *Engine oil is a major factor affecting the performance and service life of the engine. Non-detergent, vegetable, or castor based racing oils, are not recommended.*

### Recommended Oil Viscosity SAE 10W-40

Other viscosities shown in the chart below may be used when the average temperature in your riding area is within the indicated range.



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## PRE-RIDE INSPECTION

### WARNING

*\* If the Pre-ride Inspection is not performed, serious damage or an accident may result.*

Inspect your motorcycle every day before you start the engine. The items listed here will only take a few minutes, and in the long run they can save time, expense and possibly your life.

1. Engine oil level—add engine oil if required (page 26). Check for leaks.
2. Fuel level—fill fuel tank when necessary (pages 24–25). Check for leaks.
3. Front and rear brakes—check operation; make sure there is no brake fluid leakage. Adjust free play if necessary (page 59–62).
4. Tires—check condition and pressure (page 5–7).

---

## OPERATION

5. Drive chain—check condition and slack (page 63–65). Adjust and lubricate if necessary.
6. Throttle—check for smooth opening and closing in all steering positions.
7. Lights and horn—check that headlight, tail/stoplight, turn signals, indicators and horn function properly.
8. Engine stop switch—check for proper function (page 20).

Correct any discrepancy before you ride. Contact your authorized Honda dealer for assistance if you cannot correct the problem.

## STARTING THE ENGINE

### WARNING

- \* *Never run the engine in a closed area. The exhaust contains poisonous carbon monoxide gas.*

### NOTE:

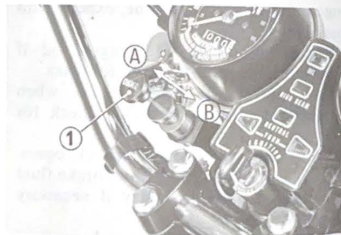
- \* Do not use the electric starter for more than 5 seconds at a time. Release the starter button for approximately 10 seconds before pressing it again.
- \* The electric starter will work when the transmission is in gear with the clutch disengaged.
- \* Do not flood the engine by twisting the throttle repeatedly. The carburetors have an accelerator pump.

### Preparation

Make sure the transmission is in neutral, and the engine stop switch is at RUN. Turn the fuel valve ON. Insert the key and turn the ignition switch ON. Check that the red oil pressure warning light comes on.

### Starting Procedure

To restart a warm engine, follow the procedure for "High Air Temperature."



(1) Choke knob (A) Fully Closed  
(B) Fully Open

### Normal Air Temperature

10°–35°C (50°–95°F)

1. Pull the choke knob (1) up all the way to Fully Closed (A).
2. Start the engine, leaving the throttle closed.

### CAUTION:

- \* *The red oil pressure warning light should go off a few seconds after the engine starts. If the light stays on, stop the engine immediately and check engine oil level. Do not operate the engine with insufficient oil pressure.*
3. Immediately after the engine starts, operate the choke knob to keep fast idle at 1,500–2,500 rpm.
  4. About a half minute after the engine starts, push the choke knob down all the way to Fully Open (B).
  5. If idling is unstable, open the throttle slightly.

### High Air Temperature—

35°C (95°F) or above

1. Do not use the choke.
2. Open the throttle slightly.
3. Start the engine.

### Low Air Temperature—

10°C (50°F) or below

1. Follow steps 1 thru 2 under "Normal Air Temperature."
2. Warm up the engine by opening and closing the throttle slightly while gradually pushing down the choke knob.
3. Continue warming up the engine until it will idle smoothly with the choke knob pushed down all the way to Fully Open (B).

### **CAUTION:**

- \* *Extended use of the choke may impair piston and cylinder wall lubrication.*

### **Flooded Engine**

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine, turn the engine stop switch OFF and push the choke knob down to Fully Open (B). Open the throttle fully and crank the engine for 5 seconds. Turn the engine stop switch ON and follow the "High Air Temperature" starting procedure.

### **BREAK-IN**

During the first 600 miles (1,000 km), do not operate the motorcycle at more than 80% of the maximum speed in any gear. Avoid full throttle operation, and do not operate for a long time at one speed. During initial break-in, newly machined surfaces will be in contact with each other and these surfaces will wear in quickly. Break-in maintenance at 600 miles (1,000 km) is designed to compensate for this minor wear. Timely performance of the break-in maintenance will ensure optimum service life and performance from the engine.

### **NOTE: (USA ONLY)**

- \* After break-in maintenance, remove the "BREAK-IN" caution label from the speedometer lens.

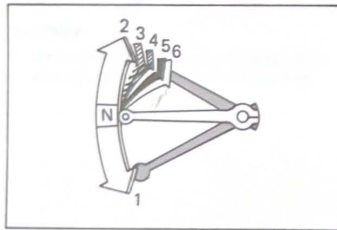




## RIDING

### WARNING

- \* Review *Motorcycle Safety* (pages 1~9) before you ride.
- \* Make sure the side stand is fully retracted before riding the motorcycle. If the stand is extended, it may interfere with control during a left turn.



Shifting pattern

Proper shifting will provide better fuel economy. When changing gears under normal conditions, use the shifting points recommended by Honda as follows:

#### Shifting Up:

From 1st to 2nd:	12 mph (20 km/h)
From 2nd to 3rd:	19 mph (30 km/h)
From 3rd to 4th:	25 mph (40 km/h)
From 4th to 5th:	31 mph (50 km/h)
From 6th to 5th:	25 mph (40 km/h)

#### Shifting Down:

From 5th to 6th:	37 mph (60 km/h)
From 5th to 4th:	19 mph (30 km/h)
From 4th to 3rd:	12 mph (20 km/h)

Disengage the clutch when speed drops below 9 mph (15 km/h), when engine roughness is evident, or when engine stalling is imminent; and shift down to 1st gear for acceleration.

### WARNING

- \* Do not downshift when traveling at a speed that would force the engine to overrev in the next lower gear, or cause the rear wheel to lose traction.

#### CAUTION:

- \* Do not shift gears without disengaging the clutch and closing the throttle. The engine and drive train could be damaged by overspeed and shock.
- \* Do not tow the motorcycle or coast for long distances while the engine is off. The transmission will not be properly lubricated and damage may result.

#### NOTE:

- \* The battery will not charge while the engine speed is below 1,200 rpm. Avoid idling for prolonged periods, or continuous operation below 1,200 rpm.

## High Altitude Riding

When operating this motorcycle at high altitude the air-fuel mixture becomes overly rich. Above 6,500 feet (2,000 m) driveability and performance may be reduced and fuel consumption increased. See your authorized Honda dealer for high altitude adjustment.

## BRAKING

1. For normal braking, gradually apply both front and rear brakes while downshifting to suit your road speed.
2. For maximum deceleration, close the throttle and apply the front and rear brakes firmly. Disengage the clutch before the motorcycle stops.

### WARNING

- \* Independent use of only the front or rear brake reduces stopping performance. Extreme braking may cause either wheel to lock, reducing control of the motorcycle.
- \* When possible, reduce speed or brake before entering a turn; closing the throttle or braking in mid-turn may cause wheel slip. Wheel slip will reduce control of the motorcycle.
- \* When riding in wet or rainy conditions, or on loose surfaces, the ability to maneuver and stop will be reduced.

*All of your actions should be smooth under these conditions. Sudden acceleration, braking, or turning may cause loss of control. For your safety, exercise extreme caution when braking, accelerating, or turning.*

- \* When descending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.

## PARKING

1. After stopping the motorcycle, shift the transmission into neutral, turn the fuel valve OFF and turn the ignition switch OFF.
2. Use the side or center stand to support the motorcycle while parked.

### CAUTION:

- \* Park the motorcycle on firm, level ground to prevent overturning
3. Lock the steering to help prevent theft (page 22).

### NOTE:

- \* When stopping for a short time near traffic at night, the ignition switch may be turned to P and the key removed. This will turn on the taillight to make the motorcycle more visible.
- \* The battery will discharge if the ignition switch is left at P for too long a time.

## ANTI-THEFT TIPS

1. Always lock the steering and never leave the key in the ignition switch. This sounds simple but people do forget.
2. Be sure the registration information for your motorcycle is accurate and current.
3. Park your motorcycle in a locked garage whenever possible.
4. Use an additional anti-theft device of good quality.
5. Put your name, address, and phone number in this Owner's Manual and keep it on your motorcycle at all times. Many times stolen motorcycles are identified by information in the Owner's Manuals which are still with them.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE NO: \_\_\_\_\_

## SPECIAL PROCEDURES

These special procedures are intended to help you out in case of trouble on the road: a flat tire, or a blown fuse. In case of a flat tire, you can remove the entire wheel and take it to a qualified repair facility. Refer to "TIRES" on pages 5-7. Because of the critical nature of wheel attachment, you should proceed to an authorized Honda dealer as soon as possible after repair to verify proper assembly.

### WARNING

*\* Stop the engine and support the motorcycle securely on a level surface before performing these procedures.*

### Tool Kit

The tool kit (1) is in the compartment under the seat. Some roadside repairs, minor adjustments and parts replacement can be performed with the tools contained in the kit.

- Hook spanner
- 10 X 12mm open end wrench
- 14 X 17mm open end wrench
- Pliers
- No. 2 screwdriver
- No. 2 phillips screwdriver
- No. 3 phillips screwdriver
- Screwdriver grip
- Spark plug wrench
- Handle for 19 and 22mm wrenches
- 19mm wrench
- 22mm wrench
- Tool bag



(1) Tool kit

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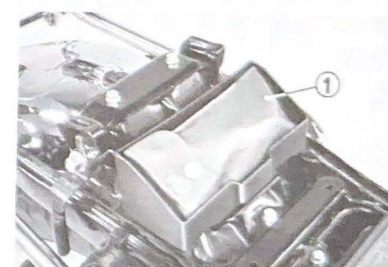
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- Handle for 19 and 22mm wrenches
- 19mm wrench
- 22mm wrench
- Tool bag



(1) Tool kit

### Front Wheel Removal

1. Raise the front wheel off the ground by placing a support block under the engine.
2. Remove the speedometer cable set screw (1) and disconnect the speedometer cable (2).
3. Remove the caliper assembly (3) from the fork leg by removing the fixing bolts (4).

#### CAUTION:

\* Support the caliper assembly so that it



- (1) Set screw (4) Caliper fixing bolts  
(2) Speedometer cable (5) Axle nut  
(3) Caliper assembly

40

does not hang from the brake hose. Do not twist the brake hose.

4. Remove the axle nut (5).
5. Remove the front axle holder nuts (6) and the front axle holder (7).
6. Remove the axle (8). Remove the wheel.

#### NOTE:

\* Do not depress the brake lever when the wheel is off the motorcycle. The caliper piston will be forced out of the cylinder with subsequent loss of brake fluid. If this occurs, servicing of the brake system will be necessary. See your authorized Honda dealer.



- (6) Holder nuts (8) Axle  
(7) Axle holder (9) Arrow

### Installation Notes:

- Reverse the removal procedure.
- Insert the axle through the wheel hub and the left fork leg. When tightening the axle nut, keep the handlebar and the wheel straight ahead. Be sure to set the speedometer gear box so there are no sharp bends in the speedometer cable.

Axle nut torque:

50–80 N·m (5.0–8.0 kg-m,  
36–58 ft-lb)

- Install the axle holder (7) with the arrow (9) forward and tighten the forward holder nut (6) to the specified torque first, then tighten the rear nut to the same torque.

Axle holder nut torque:

18–25 N·m (1.8–2.5 kg-m,  
13–18 ft-lb)

- Fit the caliper over the disc taking care not to damage the brake pads. Install the caliper mounting bolts and tighten to the recommended torque 30–45 N·m (3.0–4.5 kg-m, 22–33 ft-lb).
- After installing the wheel, apply the brake several times and check for free wheel rotation when released.

#### WARNING

\* If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly.

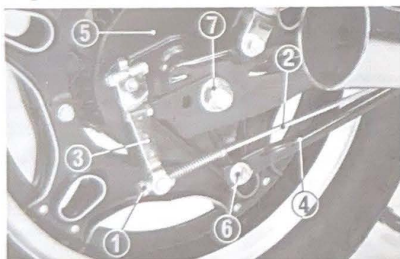
#### CAUTION:

\* Always replace used cotter pins with new ones.



### Rear Wheel Removal

1. Place the motorcycle on its center stand.
2. Remove the rear brake adjusting nut (1). Disconnect the brake rod (2) from the brake arm (3). Disconnect the stopper arm (4) from the brake panel (5) by removing the cotter pin, stopper arm nut (6), washer and rubber grommet.



- |                   |                     |
|-------------------|---------------------|
| (1) Adjusting nut | (5) Brake panel     |
| (2) Brake rod     | (6) Stopper arm nut |
| (3) Brake arm     | (7) Axle nut        |
| (4) Stopper arm   |                     |

3. Remove the axle nut (7) and pull out the rear axle. Push the wheel forward and derail the drive chain from the rear sprocket. Tilt the motorcycle to one side so that the wheel can be removed.

#### Installation Notes:

- To install the rear wheel, reverse the removal procedure.

Axle nut torque:

70–100 N·m (7.0–10.0 kg-m,  
51–72 ft-lb)

Stopper arm nut torque:

18–25 N·m (1.8–2.5 kg-m,  
13–18 ft-lb)

- Adjust the brake (page 61) and drive chain (page 64-65).
- Apply the brake several times and check for free wheel rotation, when released.

#### WARNING

\* If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly.

#### CAUTION:

\* Always replace used cotter pins with new ones.



### Fuse Replacement

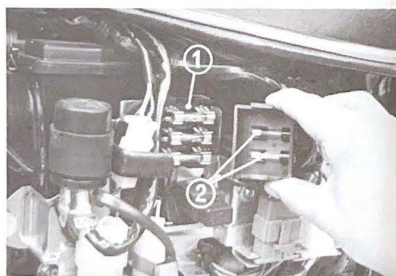
The fuse box (1) is inside the left side cover.

The specified fuses are 15A and 7A. When frequent fuse failure occurs, it usually indicates a short circuit or an overload in the electrical system. See your authorized Honda dealer for repair.

#### CAUTION:

- \* Turn the ignition switch OFF before checking or replacing the fuses to prevent accidental short-circuiting.

To replace fuses in the fuse box (1), remove the fuse box cover. Pull the old fuse out of the clips, or slide it lengthwise until one end comes out, then lift it out with your fingers. Push a new fuse into the clips and install the fuse box cover.

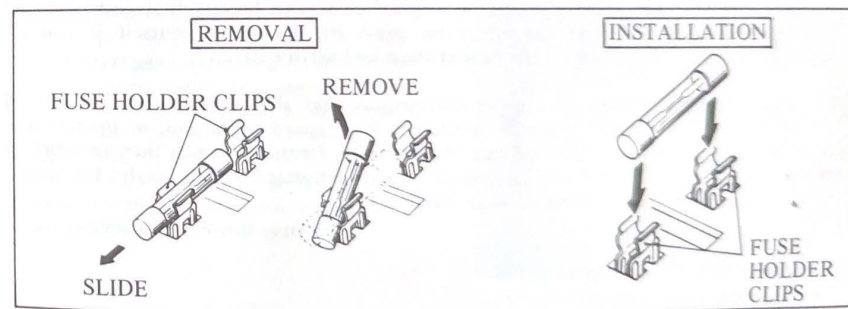


(1) Fuse box (2) Spare fuses

#### WARNING

- \* Never use a fuse with a different rating from that specified. Serious damage to the electrical system or a fire may result, causing a dangerous loss of lights or engine power at night or in traffic.

- \* Do not pry the clips open to get a fuse out; you could bend them and cause poor contact with the new fuse. A loose fuse could cause damage to the electrical system and even start a fire.



## MAINTENANCE

- The U.S. Environmental Protection Agency requires manufacturers to certify that motorcycles built after December 31, 1977 will comply with applicable emissions standards during their useful life, when operated and maintained according to the instructions provided. Compliance with the terms of the Distributor's Warranty for Honda Motorcycle Emission Control Systems is necessary in order to keep the emissions system warranty in effect. (USA ONLY).
- When service is required, remember that your authorized Honda dealer knows your motorcycle best and is fully equipped to maintain and repair it. The scheduled maintenance may also be performed by a qualified service facility that normally does this kind of work; or you may perform most of the work yourself if you are mechanically qualified and have the proper tools and service data.
- These instructions are based on the assumption that the motorcycle will be used exclusively for its designed purpose. Sustained high speed operation, or operation in unusually wet or dusty conditions will require more frequent service than specified in the MAINTENANCE SCHEDULE. Consult your authorized Honda dealer for recommendations applicable to your individual needs and use.

### WARNING

- \* If your motorcycle is overturned or involved in a collision, inspect control levers, cables, brake hose, caliper, accessories, and other vital parts for damage. Do not ride the motorcycle if damage impairs safe operation. Have your Honda dealer inspect the major components including frame, suspension, and steering parts for misalignment and damage that you may not be able to detect.
- \* Stop the engine and support the motorcycle securely on a level surface before performing any maintenance.
- \* Use new, genuine Honda parts or their equivalent for maintenance and repair. Parts which are not of equivalent quality may impair the safety of your motorcycle and the effective operation of the emission control systems.

The Vehicle Emission Control Information label is attached to the frame on the left side below the seat. (USA ONLY).



(1) Vehicle Emission Control Information

## MAINTENANCE SCHEDULE

Perform the Pre-ride Inspection (Page 29) at each scheduled maintenance period.

I : INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE IF NECESSARY

C : CLEAN R: REPLACE A: ADJUST L: LUBRICATE

ITEM	FREQUENCY	WHICHEVER COMES FIRST ↓	ODOMETER READING [NOTE (3)]						Refer to
			600mi (1,000km)	4,000mi (6,400km)	8,000mi (12,800km)	12,000mi (19,200km)	16,000mi (25,600km)	20,000mi (32,000km)	
		EVERY							
* FUEL LINES			I	I	I	I	I		
* FUEL STRAINER			C	C	C	C	C	C	
* THROTTLE OPERATION			I	I	I	I	I	I	
* CARBURETOR-CHOKE			I	I	I	I	I	I	
AIR CLEANER	NOTE (1)		C	R	C	R	C		Page 55
CRANKCASE BREATHER	NOTE (2)		C	C	C	C	C		Page 56
SPARK PLUGS			R	R	R	R	R		Page 53
* VALVE CLEARANCE			I	I	I	I	I	I	
ENGINE OIL	YEAR	R	REPLACE EVERY 2,000 mi (3,200 km)						Page 51
ENGINE OIL FILTER	YEAR	R	R	R	R	R	R	R	Page 52
** BALANCER CHAIN TENSION				A					
* CAM CHAIN TENSION			A	A	A	A	A	A	
* CARBURETOR- SYNCHRONIZATION			I	I	I	I	I	I	
* CARBURETOR-IDLE SPEED			I	I	I	I	I	I	Page 54

ITEM	FREQUENCY	WHICHEVER COMES FIRST ↓	ODOMETER READING [NOTE (3)]						Refer to
			600 mi (1,000 km)	4,000 mi (6,400 km)	8,000 mi (12,800 km)	12,000 mi (19,200 km)	16,000 mi (25,600 km)	20,000 mi (32,000 km)	
		EVERY							
DRIVE CHAIN			I, L EVERY 300 mi (500 km)						Pages 63-65
BATTERY	MONTH	I	I	I	I	I	I	I	Pages 67-68
BRAKE FLUID (FRONT)	MONTH I 2 YEARS R	I	I	I	*R	I	I		Pages 59-60
BRAKE SHOE/PAD WEAR			I	I	I	I	I	I	Pages 59-62
BRAKE SYSTEM			I	I	I	I	I	I	Pages 61-62
* BRAKE LIGHT SWITCH			I	I	I	I	I	I	
* HEADLIGHT AIM			I	I	I	I	I	I	
CLUTCH			I	I	I	I	I	I	Pages 57-58
SIDE STAND			I	I	I	I	I	I	Page 66
* SUSPENSION			I	I	I	I	I	I	
* NUTS, BOLTS, FASTENERS			I	I	I	I	I	I	
** WHEELS			I	I	I	I	I	I	
** STEERING HEAD BEARING			I		I		I		

\* SHOULD BE SERVICED BY AN AUTHORIZED HONDA DEALER, UNLESS THE OWNER HAS PROPER TOOLS AND SERVICE DATA AND IS MECHANICALLY QUALIFIED. REFER TO THE OFFICIAL HONDA SHOP MANUAL.

\*\* IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BE SERVICED ONLY BY AN AUTHORIZED HONDA DEALER.

NOTE:

- (1) Service more frequently when riding in dusty areas.
- (2) Service more frequently when ridden in rain, at full throttle or after the motorcycle is washed or overturned.
- (3) For higher odometer readings, repeat at the frequency interval established here.



## MAINTENANCE RECORD

Miles	Performed By	Odometer	Date
600			
4,000			
8,000			
12,000			
16,000			
20,000			

- Make sure that whoever performs the maintenance completes this record. All scheduled maintenance, including the 600 mile (1,000 km) break-in maintenance, is considered a normal owner operating cost and will be charged for by your dealer.

Detailed receipts verifying the performance of required maintenance should be retained. These receipts should be transferred with the motorcycle to the new owner if the motorcycle is sold.

## Engine Oil

Engine oil quality is the chief factor affecting engine service life. Change the engine oil when specified by the maintenance schedule.

### NOTE:

- \* Change the engine oil with the engine at normal operating temperature and the motorcycle on its center stand to assure complete and rapid draining.

1. Remove the oil filler cap from the right crankcase cover.
2. Place an oil drain pan under the crankcase and remove the oil drain plug (1).
3. Remove the oil filter bolt (2) and the cover (3).
4. After the oil has completely drained, make sure the sealing washer (4) on the drain plug is in good condition.
5. Install the drain plug.

Drain plug torque:

25–35 N·m (2.5–3.5 kg-m,  
18–25 ft-lb)

6. Make sure the oil filter bolt and cover O-rings are in good condition. Install the cover and tighten the oil filter bolt. Oil filter bolt torque:

20–32 N·m (2.0–3.2 kg-m,  
14–23 ft-lb)

7. Fill the crankcase with approximately 2.5 liters (2.6 US quarts) of the recommended grade oil.
8. Install the oil filler cap / dipstick.
9. Start the engine and let it idle for a few minutes.
10. Stop the engine. Make sure the oil level is at the upper level mark with the motorcycle upright, and there are no oil leaks.



- (1) Oil drain plug  
(2) Oil filter bolt

- (3) Oil filter cover  
(4) Sealing washer

### Oil Filter

#### NOTE:

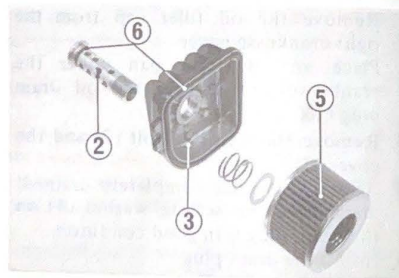
- \* Change the oil filter after draining the engine oil.

1. Remove the oil filter bolt (2), and pull the oil filter element (5) out of the oil filter cover (3).
2. Insert a new oil filter element.
3. Tighten the oil filter cover with the oil filter bolt.

Oil filter bolt torque:

28–32 N·m (2.8–3.2 kg-m,  
20–23 ft-lb)

4. Perform steps 7–10 of Engine Oil Change.



(2) Oil filter bolt  
(3) Oil filter cover

(5) Oil filter element  
(6) O-rings

### Spark Plugs

#### Recommended spark plugs:

Standard:

X24ESR-U (ND), DR8ES-L (NGK)

For cold climate (Below 5°C, 41°F):

X22ESR-U (ND), DR7ES (NGK)

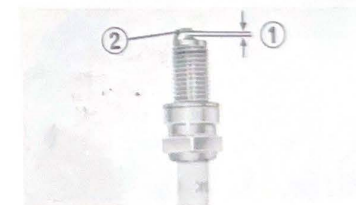
For extended high speed riding:

X27ESR-U (ND), DR8ES (NGK)

1. Disconnect the spark plug caps.
2. Clean any dirt from around the spark plug base.
3. Remove and discard the plugs.
4. Make sure the new spark plug gap (1) is 0.6–0.7 mm (0.024–0.028 in) using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode (2) carefully.
5. With the plug washer attached, thread the new spark plugs in by hand to prevent cross-threading.
6. Tighten the spark plugs 1/2 turn with a spark plug wrench to compress the washer.
7. Install the plug caps.

#### CAUTION:

- \* The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the engine.
- \* Never use a spark plug with an improper heat range.



(1) Spark plug gap

(2) Side electrode

### Idle Speed

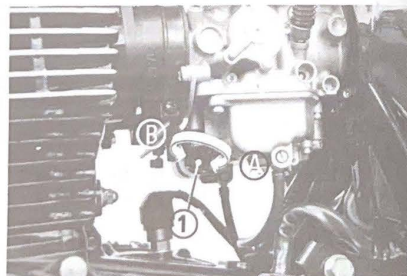
The idle speed adjustment procedure given here should only be used when changes in altitude affect normal idling speed as set by your dealer. See your authorized Honda dealer for regularly scheduled carburetor adjustment, including individual carburetor adjustment and synchronization.

### NOTE:

\* The engine must be warm for accurate idle speed adjustment. Ten minutes of stop-and-go riding is sufficient.

1. Warm up the engine, shift to neutral and place the motorcycle on its center stand.
2. Adjust idle speed with the throttle stop screw (1).

Idle Speed:  $1,200 \pm 100$  rpm



(1) Throttle stop screw (A) Increase r.p.m.  
(B) Decrease r.p.m.

### Air Cleaner

The air cleaner should be serviced at regular intervals (page 48). Service more frequently when riding in dusty areas.

1. Remove the seat (page 23).
2. Remove the air cleaner cover screws (2) and the cover (1). Remove the element (3).



(1) Air cleaner cover (2) Screws



(3) Air cleaner element

3. Tap the element lightly to loosen dust.
4. Blow away remaining dust by applying compressed air from the outside. Replace the element if it is excessively dirty, torn or damaged.
5. Reinstall the air cleaner parts in reverse order of removal.



### Crankcase Breather

1. Remove the two drain plugs from the tubes, and drain the deposits and water.
2. Reinstall the two drain plugs (1).

#### NOTE:

\* Service more frequently when ridden in rain, at full throttle or after the motorcycle is washed or overturned. Service if the deposit level can be seen in the transparent section of the drain tubes.



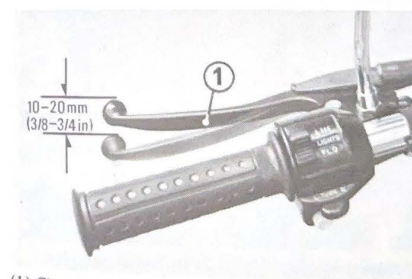
(1) Drain plugs

### Clutch

#### Adjustment:

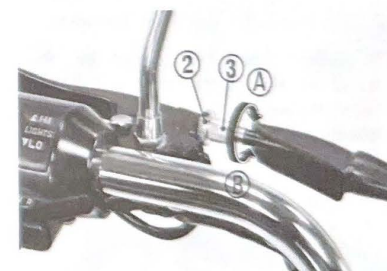
Clutch adjustment may be required if the motorcycle stalls when shifting into gear, or tends to creep; or if the clutch slips, causing acceleration to lag behind engine speed.

Normal clutch lever free play is 10–20 mm (3/8–3/4 in) at the lever (1). Minor adjustment can be made with the clutch cable adjuster (3) at the lever.



(1) Clutch lever

1. Pull back the rubber dust cover. Loosen the lock nut (2) and turn the adjuster (3). Tighten the lock nut (2), and check adjustment.
2. If the adjuster is threaded out near its limit or if the correct free play cannot be obtained, loosen the lock nut (2) and turn in the cable adjuster (3) completely. Tighten the lock nut (2) and pull on the dust cover.



- (2) Lock nut (A) Increase free play  
(3) Clutch cable adjuster (B) Decrease free play

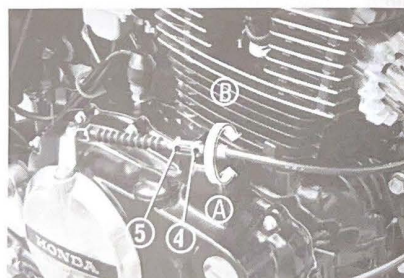
3. At the lower end of the cable, loosen the lock nut (5). Turn the adjusting nut (4) to obtain the specified free play. Tighten the lock nut (5), and check adjustment.
4. Start the engine, pull in the clutch lever and shift into gear. Make sure the engine does not stall, and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. The motorcycle should start smoothly and accelerate gradually.

**NOTE:**

- \* If proper adjustment cannot be obtained or the clutch does not work correctly, see your authorized Honda dealer.

**Other Checks:**

Check the clutch cable for kinks or signs of wear that could cause sticking or failure. Lubricate the clutch cable with a commercially available cable lubricant to prevent premature wear and corrosion.



(4) Adjusting nut  
(5) Lock nut

(A) Increase free play  
(B) Decrease free play

**Front Brake**

This model has a hydraulic disc front brake.

As the brake pads wear, brake fluid level drops, automatically compensating for wear.

There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must be inspected frequently to ensure there are no fluid leaks.

If the control lever free play becomes excessive and the brake pads are not worn beyond the recommended limit (page 60), there is probably air in the brake system and it must be bled. See your authorized Honda dealer.

**Brake Fluid Level:**

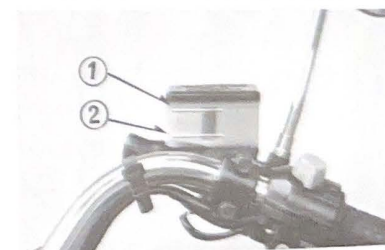
**WARNING**

- \* *Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.*

Remove the screws, reservoir cap and diaphragm. Whenever the level is near the lower level mark (2) on the front reservoir, fill the reservoir with DOT 3 BRAKE FLUID from a sealed container, up to the upper level mark (1). Reinstall the diaphragm and reservoir cap. Tighten the screws securely.

**CAUTION:**

- \* *When adding brake fluid be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.*



(FRONT) (1) Upper level mark  
(2) Lower level mark

#### CAUTION:

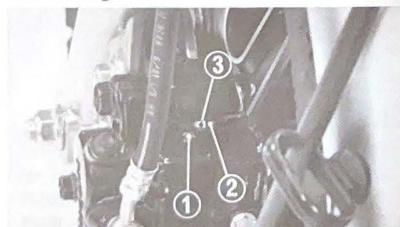
- \* Use only DOT 3 brake fluid from a sealed container.
- \* Handle brake fluid with care because it can damage paint and instrument lenses.
- \* Never allow contaminants (dirt, water, etc.) to enter the brake fluid reservoir.

#### Brake pads:

Brake pad wear will depend upon the severity of usage, type of riding, and condition of the roads. The pads will wear faster on dirty and wet roads. Inspect the pads visually from the direction indicated by the arrow (1) during all regular service intervals to determine the pad wear. If either pad wears to the line (2), both pads must be replaced.

#### Other Checks:

Make sure there are no fluid leaks. Check for deterioration or cracks in the hose and fittings.



(1) Arrow (2) Wear (3) Brake disc

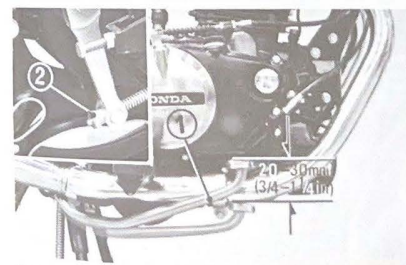
#### Rear Brake

##### Adjustment:

1. Measure the distance the rear brake pedal (1) moves before the brake starts to take hold.  
Free play should be 20–30 mm (3/4–1-1/4 in). If adjustment is necessary, turn the rear brake adjusting nut (2).

##### NOTE:

- \* Make sure that the cut-out on the



(1) Rear brake pedal (2) Adjusting nut

adjusting nut is seated on the brake arm pin.

2. Apply the brake several times and check for free wheel rotation when released.

##### NOTE:

- \* If proper adjustment cannot be obtained by this method, see your authorized Honda dealer.

##### Other Checks:

Make sure the brake rod, brake arm, spring and fasteners are in good condition.

#### Wear Indicator:

When the brake is applied, an arrow (3), attached to the brake arm (4), moves toward a reference mark (2) on the brake panel (1).

If the arrow aligns with the reference mark on full application of the brake, the brake shoes must be replaced.



(1) Brake panel      (3) Arrow  
(2) Reference mark      (4) Brake arm

#### Drive Chain

The service life of the drive chain is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

The drive chain should be checked and lubricated as part of the Pre-ride Inspection (page 29). Under severe usage, or when the motorcycle is ridden in unusually dusty areas, more frequent maintenance will be necessary.

#### Inspection:

1. Turn the engine off, place the motorcycle on the center stand and shift the transmission into neutral.
2. Check slack in the lower drive chain run midway between the sprockets. Drive chain slack should be adjusted to allow 15–25 mm (5/8–1 in) vertical movement by hand. Rotate the rear wheel and check drive chain slack as the wheel rotates. Drive chain

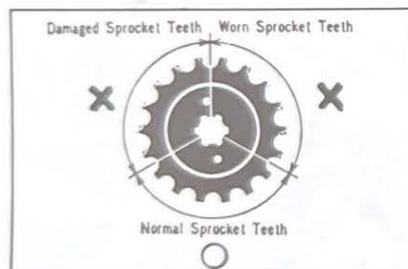
slack should remain constant as the wheel rotates. If the chain is slack in one section and taut in another, some links are kinked and binding. Binding can frequently be eliminated by lubrication.



(1) Drive chain



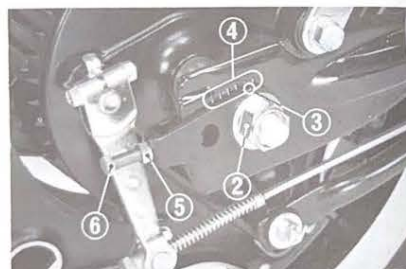
3. Inspect the sprocket teeth for wear or damage.
4. If the drive chain or sprockets are excessively worn or damaged, they should be replaced. Never use a new chain with worn sprockets; rapid chain wear will result.



#### Adjustment:

If the drive chain requires adjustment, the procedure is as follows:

1. Loosen the rear axle nut (2).
2. Loosen the lock nut (5) and turn the adjusting bolt (6) on both the right and left chain adjusters to increase or decrease chain slack. Align the chain



- |                     |                    |
|---------------------|--------------------|
| (2) Axle nut        | (5) Lock nut       |
| (3) Index mark      | (6) Adjusting bolt |
| (4) Graduated scale |                    |

adjuster index marks (3) with corresponding scale (4) graduations on both sides of the swingarm.

#### NOTE:

- \* If drive chain slack is excessive when the rear axle is moved to the furthest limit of adjustment, the drive chain is worn and must be replaced.

3. Tighten the rear axle nut.

Torque for rear axle nut:

70–100 N·m (7.0–10.0 kg-m,  
51–72 ft-lb)

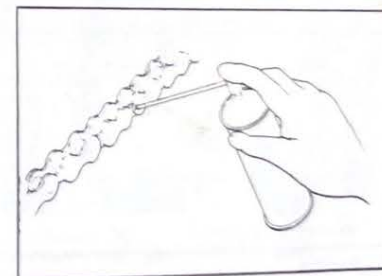
4. Tighten the lock nuts.
5. Recheck drive chain slack.
6. Rear brake pedal free play is affected when repositioning the rear wheel to adjust drive chain slack. Check rear brake pedal free play and adjust as necessary (page 61).

#### CAUTION:

- \* Always replace used cotter pins with new ones.

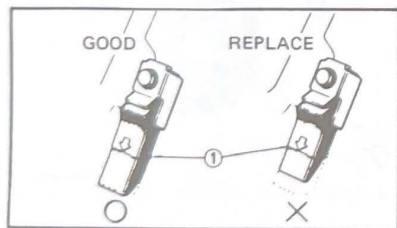
#### Lubrication:

Commercially prepared drive chain lubricants may be purchased at most motorcycle shops and should be used in preference to motor oil or other lubricants. Saturate each chain link joint so that the lubricant penetrates between the link plates, pins, bushings, and rollers.



### Side Stand

Check the rubber pad for deterioration and wear. Replace if wear extends to the wear line (1) as shown. Check the side stand spring for damage and loss of tension, and the side stand assembly for freedom of movement. See your authorized Honda dealer for replacement.



(1) Wear line

### Battery

If the motorcycle is operated with insufficient battery electrolyte, sulfation and battery plate damage will occur.

If rapid loss of electrolyte is experienced, or if your battery seems to be weak, causing slow starting or other electrical problems, see your authorized Honda dealer.

#### Battery electrolyte:

The battery (1) is behind the right side cover. Remove the side cover. Remove the terminal leads from the battery (1). Remove the bolt. Pull out the battery and check the electrolyte.

The electrolyte level must be maintained between the upper (2) and lower (3) level marks on the side of the battery. If the electrolyte level is low, remove the battery filler caps (4).

Carefully add distilled water to the upper level mark using a small syringe or plastic funnel.

#### NOTE:

- \* Use only distilled water in the battery. Tap water may shorten the service life of the battery.



(1) Battery (2) Upper level mark (3) Lower level mark (4) Filler caps

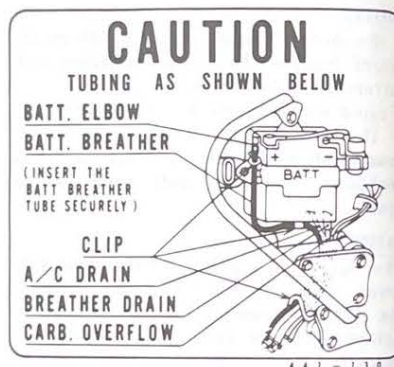


**WARNING**

- \* The battery contains sulfuric acid. Avoid contact with skin, eyes or clothing. Antidote: **EXTERNAL**-Flush with water. **INTERNAL**-Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call physician immediately. Eyes: Flush with water and get prompt medical attention.
- \* Batteries produce explosive gases. Keep sparks, flames and cigarettes away. Ventilate when charging or using in enclosed space. Always shield eyes when working near batteries.
- \* **KEEP OUT OF REACH OF CHILDREN.**

**CAUTION:**

- \* When checking the battery electrolyte level or adding distilled water, make sure the breather tube is connected to the battery breather outlet.



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**CLEANING**

Clean your motorcycle regularly to protect the surface finish and inspect for damage, wear, and oil or hydraulic fluid seepage.

**CAUTION:**

- \* Avoid spraying high pressure water (typical in coin-operated car washes) at the following area:
    - Wheel Hubs
    - Muffler Outlets
    - Under Fuel Tank
    - Under Seat
    - Carburetors
    - Instruments
    - Hydraulic Brake Master Cylinder
    - Ignition Switch
    - Steering Lock
    - Drive Chain
    - Handlebar Switches
1. After cleaning, rinse the motorcycle thoroughly with plenty of clean water. Strong detergent residue can corrode alloy parts.
  2. Dry the motorcycle, start the engine, and let it run for several minutes.

3. Test the brakes before riding the motorcycle in traffic. Several applications may be necessary to restore normal braking performance.

**WARNING**

- \* Braking performance may be impaired immediately after washing the motorcycle.
4. Lubricate the drive chain immediately after washing the motorcycle.

## STORAGE GUIDE

### STORAGE

Extended storage, such as for winter, requires that you take certain steps to reduce the effects of deterioration from non-use of the motorcycle. In addition, necessary repairs should be made **BEFORE** storing the motorcycle; otherwise, these repairs may be forgotten by the time the motorcycle is removed from storage.

1. Change the engine oil and filter.
2. Lubricate the drive chain.
3. Drain the fuel tank and carburetors. Spray the inside of the tank with an aerosol rust-inhibiting oil. Reinstall the fuel cap on the tank.

#### WARNING

\* *Gasoline is flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks near the equipment while draining fuel.*

4. Remove the spark plugs and pour a tablespoon (15–20 cc) of clean engine oil into each cylinder. Operate the starter for a few seconds to distribute the oil, then reinstall the spark plugs.

#### NOTE:

- \* When turning the engine, the Engine Stop Switch should be OFF and each spark plug placed in its cable cap and grounded to prevent damage to the ignition system.
5. Remove the battery. Store in an area protected from freezing temperatures and direct sunlight. Check the electrolyte level and slow charge the battery once a month.
  6. Wash and dry the motorcycle. Wax all painted surfaces. Coat chrome with rustinhibiting oil.
  7. Inflate the tires to their recommended pressures. Place the motorcycle on blocks to raise both tires off the ground.

8. Cover the motorcycle (don't use plastic or other coated materials) and store in an unheated area, free of dampness with a minimum of daily temperature variation. Do not store the motorcycle in direct sunlight.

### REMOVAL FROM STORAGE

1. Uncover and clean the motorcycle. Change the engine oil if more than 4 months have passed since the start of storage.
2. Check the battery electrolyte level and charge the battery as required. Install the battery.
3. Drain any excess aerosol rust-inhibiting oil from the fuel tank. Fill the fuel tank with fresh gasoline.
4. Perform all Pre-ride Inspection checks (page 29). Test ride the motorcycle at low speeds in a safe riding area away from traffic.

## EMISSION CONTROL SYSTEM (USA ONLY)

### • Source of Emissions

The combustion process produces carbon monoxide and hydrocarbons. Control of hydrocarbons is very important because, under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic.

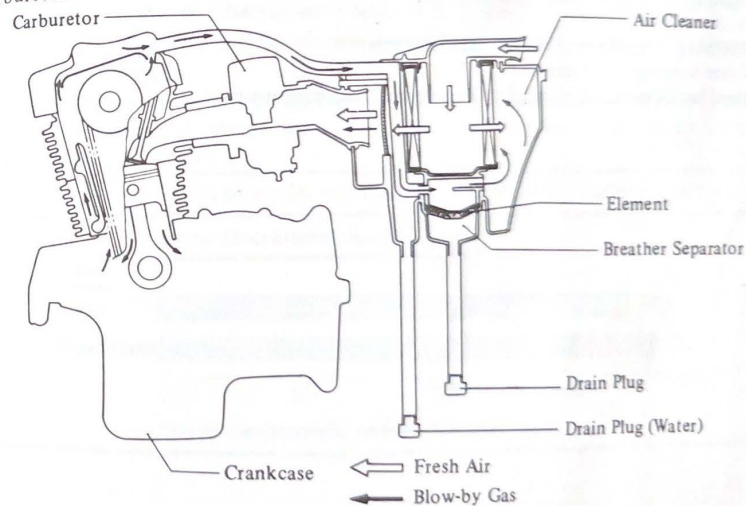
Honda Motor Co., Ltd. utilizes lean carburetor settings and other systems to reduce carbon monoxide and hydrocarbons.

### • Exhaust Emission Control System

The exhaust emission control system is composed of lean carburetor settings, and no adjustments should be made except idle speed adjustment with the throttle stop screw. The exhaust emission control system is separate from the crankcase emission control system.

### • Crankcase Emission Control System

The engine is equipped with a closed crankcase system to prevent discharging crankcase emissions into the atmosphere. Blow-by gas is returned to the combustion chamber through the air cleaner and the carburetors.



● Problems which may affect Motorcycle Emissions

If you are aware of any of the following symptoms, have the vehicle inspected and repaired by your local Honda Motorcycle Dealer.

Symptoms:

1. Hard starting or stalling after starting
2. Rough idle
3. Misfiring or backfiring during acceleration
4. After-burning (backfiring)
5. Poor performance (driveability) and poor fuel economy

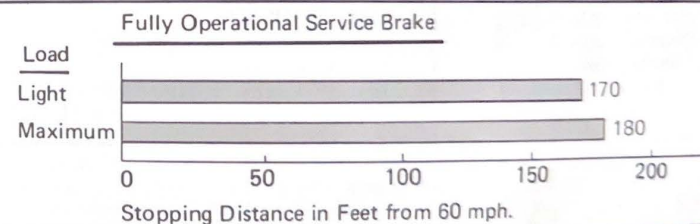
CONSUMER INFORMATION

VEHICLE STOPPING DISTANCE

This figure indicates braking performance that can be met or exceeded by the vehicles to which it applies, without locking the wheels under different conditions of loading.

The information presented represents results obtainable by skilled riders under controlled road and vehicle conditions, and the information may not be correct under other conditions.

Description of vehicles to which this table applies: HONDA CM450 CUSTOM



## SPECIFICATIONS

<b>DIMENSIONS</b>	
Overall length	2,145 mm (84.4 in)
Overall width	855 mm (33.7 in)
Overall height	1,180 mm (46.5 in)
Wheelbase	1,450 mm (57.1 in)
<b>WEIGHT</b>	
Dry weight	174 kg (384 lbs)
<b>CAPACITIES</b>	
Engine oil	2.5 ℓ (2.6 US qt) After draining
Fuel tank	13.0 ℓ (3.4 US gal)
Fuel reserve tank	2.0 ℓ (0.5 US gal)
Passenger capacity	Operator and one passenger
Vehicle capacity load	181 kg (400 lbs)
Front fork oil capacity	220 cc (7.4 oz)
Front fork air pressure	11 ± 3 psi (80 ± 20 kPa, 0.8 ± 0.2 kg/cm <sup>2</sup> )

### ENGINE

Bore and stroke  
Compression ratio  
Displacement  
Spark plugs

75 x 50.6 mm (2.95 x 1.99 in)  
9.1 : 1  
447 cc (27.3 cu-in)

Standard	X24ESR-U (ND) DR8ES-L (NGK)
For cold climate (Below 5°C, 41°F)	X22ESR-U (ND) DR7ES (NGK)
For extended high speed driving	X27ESR-U (ND) DR8ES (NGK)

Spark plug gap  
Valve clearance

0.6–0.7 mm (0.024–0.028 in)  
Intake: 0.10 mm (0.004 in)  
Exhaust: 0.14 mm (0.006 in)  
1,200 ± 100 rpm in neutral

Idle speed

### CHASSIS AND SUSPENSION

Caster  
Trail  
Tire size, front  
Tire size, rear

59°  
114 mm (4.5 in)  
3.50S18-4PR (TUBELESS)  
4.60S16-4PR (TUBELESS)



<b>POWER TRANSMISSION</b>	
Primary reduction	2.960 : 1
Final reduction	2.000 : 1
Gear ratio, 1st.	2.857 : 1
2nd.	1.947 : 1
3rd.	1.545 : 1
4th.	1.280 : 1
5th.	1.074 : 1
6th.	0.867 : 1
<b>ELECTRICAL</b>	
Battery	12 V-12 AH
Generator	A.C. Generator 0.17 kw/5,000 rpm

<b>LIGHTS</b>	
Headlight (High/Low)	50/35 W
Tail/stoplight	3/32 cp (8/27 W)
Front turn signal/ running light	32/3 cp (23/8 W)
Rear turn signal light	32 cp (23 W)
Meter lights	2 cp (3.4 W)
Neutral indicator light	2 cp (3.4 W)
Turn signal indicator light	2 cp (3.4 W)
High beam indicator light	2 cp (3.4 W)
<b>FUSE</b>	
	15 A (for main)
	7 A (for headlight and taillight)



## MEMO

## OWNER SATISFACTION

Your satisfaction and goodwill are important to your dealer and to us. Normally, any problems with the operation of your vehicle will be handled by your dealer's Service Department. Sometimes, however, despite the best intentions of all concerned, misunderstandings can occur. If your problem has not been handled to your satisfaction, we suggest you take the following action:

- \* Discuss your problem with a member of dealership management. Often complaints can be quickly resolved at that level. If the problem has already been reviewed with the Service Manager, contact the owner of the dealership or the General Manager.
- \* If your problem still has not been resolved to your satisfaction, contact the Motorcycle Customer Service Department, AMERICAN HONDA MOTOR CO., INC. 100 West Alondra Boulevard, Gardena, California 90247 (213) 327-8280, and provide them with:
  - Your name, address and telephone number
  - Vehicle frame number
  - Dealer's name and location
  - Vehicle delivery date and present mileage
  - Nature of problem

After reviewing all the facts involved, you will be advised of what action can be taken. Please bear in mind that your problem will likely be resolved in the dealership, using the dealer's facilities, equipment and personnel. So it is very important that your initial contact be with the dealer.

Your purchase of a Honda product is greatly appreciated by both your dealer and American Honda Motor Co., Inc. We want to assist you in every way possible to assure your complete satisfaction with your purchase.